



**Virginia  
Regulatory  
Town Hall**

**Notice of Intended Regulatory Action  
Agency Background Document**

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| <b>Agency Name:</b>        | Board of Medicine, Department of Health Professions         |
| <b>VAC Chapter Number:</b> | 18 VAC 85-101-10 et seq.                                    |
| <b>Regulation Title:</b>   | Regulations Governing the Practice of Radiologic Technology |
| <b>Action Title:</b>       | Credential of limited licensure in bone densitometry        |
| <b>Date:</b>               | 6/7/01  |

This information is required prior to the submission to the Registrar of Regulations of a Notice of Intended Regulatory Action (NOIRA) pursuant to the Administrative Process Act § 9-6.14:7.1 (B). Please refer to Executive Order Twenty-Five (98) and Executive Order Fifty-Eight (99) for more information.

**Purpose**

*Please describe the subject matter and intent of the planned regulation. This description should include a brief explanation of the need for and the goals of the new or amended regulation.*

The Board of Medicine is seeking to respond to a serious problem of a shortage of technicians to perform bone densitometry. To do so, the Board must amend its regulations to accept another credential or professional certification specifically for bone densitometry. The inability of physicians and diagnostic centers to hire licensed technicians has an adverse impact on a significant proportion of Virginia’s citizens, particularly peri- and postmenopausal women, and the suggested amendments are endorsed by the Board’s Advisory Committee on Radiological Technology and a number of physicians across the state who have spoken to the Board about the problem.

**Basis**

*Please identify the state and/or federal source of legal authority to promulgate the contemplated regulation. The discussion of this authority should include a description of its scope and the extent to which the authority is mandatory or discretionary. The correlation between the proposed regulatory action and the legal authority identified above should be explained. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority must be provided.*

**18 VAC 85-101-10 et seq. Regulations Governing the Practice of Radiologic Technology** were promulgated under the general authority of Title 54.1 of the Code of Virginia.

**Chapter 24** establishes the general powers and duties of health regulatory boards including the responsibility to promulgate regulations.

*§ 54.1-2400. General powers and duties of health regulatory boards. --The general powers and duties of health regulatory boards shall be:*

- 1. To establish the qualifications for registration, certification or licensure in accordance with the applicable law which are necessary to ensure competence and integrity to engage in the regulated professions.*
- 2. To examine or cause to be examined applicants for certification or licensure. Unless otherwise required by law, examinations shall be administered in writing or shall be a demonstration of manual skills.*
- 3. To register, certify or license qualified applicants as practitioners of the particular profession or professions regulated by such board.*
- 4. To establish schedules for renewals of registration, certification and licensure.*
- 5. To levy and collect fees for application processing, examination, registration, certification or licensure and renewal that are sufficient to cover all expenses for the administration and operation of the Department of Health Professions, the Board of Health Professions and the health regulatory boards.*
- 6. To promulgate regulations in accordance with the Administrative Process Act (§ 9-6.14:1 et seq.) which are reasonable and necessary to administer effectively the regulatory system. Such regulations shall not conflict with the purposes and intent of this chapter or of Chapter 1 and Chapter 25 of this title.*
- 7. To revoke, suspend, restrict, or refuse to issue or renew a registration, certificate or license which such board has authority to issue for causes enumerated in applicable law and regulations.*
- 8. To appoint designees from their membership or immediate staff to coordinate with the Intervention Program Committee and to implement, as is necessary, the provisions of Chapter 25.1 (§ 54.1-2515 et seq.) of this title. Each health regulatory board shall appoint one such designee.*
- 9. To take appropriate disciplinary action for violations of applicable law and regulations.*
- 10. To appoint a special conference committee, composed of not less than two members of a health regulatory board, to act in accordance with § 9-6.14:11 upon receipt of information that a practitioner of the appropriate board may be subject to disciplinary action. The special conference committee may (i) exonerate the practitioner; (ii) reinstate the practitioner; (iii) place the practitioner on probation with such terms as it may deem appropriate; (iv)*

*reprimand the practitioner; (v) modify a previous order; and (vi) impose a monetary penalty pursuant to § 54.1-2401. The order of the special conference committee shall become final thirty days after service of the order unless a written request to the board for a hearing is received within such time. If service of the decision to a party is accomplished by mail, three days shall be added to the thirty-day period. Upon receiving a timely written request for a hearing, the board or a panel of the board shall then proceed with a hearing as provided in § 9-6.14:12, and the action of the committee shall be vacated. This subdivision shall not be construed to affect the authority or procedures of the Boards of Medicine and Nursing pursuant to §§ 54.1-2919 and 54.1-3010.*

11. *To convene, at their discretion, a panel consisting of at least five board members or, if a quorum of the board is less than five members, consisting of a quorum of the members to conduct formal proceedings pursuant to § 9-6.14:12, decide the case, and issue a final agency case decision. Any decision rendered by majority vote of such panel shall have the same effect as if made by the full board and shall be subject to court review in accordance with the Administrative Process Act. No member who participates in an informal proceeding conducted in accordance with § 9-6.14:11 shall serve on a panel conducting formal proceedings pursuant to § 9-6.14:12 to consider the same matter.*
12. *To issue inactive licenses and certificates and promulgate regulations to carry out such purpose. Such regulations shall include, but not be limited to, the qualifications, renewal fees, and conditions for reactivation of such licenses or certificates.*

**The specific statutory authority for the Board to license radiologic technologists-limited and to determine requisite education and training is found in Chapter 29 of Title 54.1 as follows:**

**§ 54.1-2900. Definitions (Exerpted).**

*As used in this chapter, unless the context requires a different meaning:*

*"Practice of radiologic technology" means the application of x-rays to human beings for diagnostic or therapeutic purposes.*

*"Radiologic technologist, limited" means an individual, other than a licensed radiologic technologist, dental hygienist or person who is otherwise authorized by the Board of Dentistry under Chapter 27 of this title and the regulations pursuant thereto, who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.*

**§ 54.1-2956.8:1. Unlawful to practice radiologic technology without license; unlawful designation as a radiologic technologist or radiologic technologist, limited; Board to regulate radiologic technologists.** *Except as set forth herein, it shall be unlawful for a person to practice or hold himself out as practicing as a radiologic technologist or radiologic technologist, limited, unless he holds a license as such issued by the Board.*

*In addition, it shall be unlawful for any person who is not licensed under this chapter whose licensure has been suspended or revoked, or whose licensure has lapsed and has not been renewed to use in conjunction with his name the words "licensed radiologic technologist" or "licensed radiologic technologist, limited" or to otherwise by letters, words, representations, or insignias assert or imply that he is licensed to practice radiologic technology.*

*The Board shall prescribe by regulation the qualifications governing the licensure of radiologic technologists and radiologic technologists, limited. The regulations may include requirements for approved education programs, experience, examinations, and periodic review for continued competency.*

*The provisions of this section shall not apply to any employee of a hospital licensed pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 acting within the scope of his employment or engagement as a radiologic technologist.*

**§ 54.1-2956.8:2. Requisite training and educational achievements of radiologic technologists and radiologic technologists, limited.**

*The Board shall establish a testing program to determine the training and educational achievements of radiologic technologists or radiologic technologists, limited, or the Board may accept other evidence such as successful completion of a national certification examination, experience, or completion of an approved training program in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.*

## Substance

*Please detail any changes that would be implemented: this discussion should include a summary of the proposed regulatory action where a new regulation is being promulgated; where existing provisions of a regulation are being amended, the statement should explain how the existing regulation will be changed. The statement should set forth the specific reasons the agency has determined that the proposed regulatory action would be essential to protect the health, safety or welfare of citizens. In addition, a statement delineating any potential issues that may need to be addressed as the regulation is developed shall be supplied.*

### **Reasons for regulatory action:**

Osteoporosis is the most common metabolic bone disorder, often called the silent epidemic because it is asymptomatic and not clinically apparent till a fracture occurs. In 1995, an estimated 1.3 million osteoporotic fractures occurred, at a cost of \$13.8 *billion*. The National Osteoporosis Foundation projects a tripling of the number of fractures by 2040; undoubtedly, the financial impact of this will be staggering.

The single best predictor of fracture risk is bone mass or bone mineral density (BMD). Bone densitometry by DXA (dual energy x-ray absorptiometry) scan is the most widely used technique for measuring bone mass. Peripheral sites (heel, distal forearm) can be measured to *screen* for low bone mass; central sites (hip, lumbar spine) are measured to *diagnose* osteoporosis and *monitor* treatment response.

Densitometry is noninvasive, rapid, accurate, precise, and safe. Unlike other radiologic procedures an Radiologic Technologist-Limited does, DXA scanning is automated to the point that the operator cannot change the scan time, radiation dose, or distance from the radiation source. All these are preset by the scanner's manufacturer. Also unlike other x-ray procedures, the effective radiation dose to the patient is extremely small – about *1/10 that of a chest x-ray, mammogram, or dental bitewing x-ray*.

In the Code of Virginia, a radiologic technologist, limited" is defined as an individual who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body. Equipment utilized in diagnosing and monitoring osteoporosis does emit ionizing radiation, all be it in very small doses.

Therefore, technicians operating that equipment are deemed to need a license as a radiologic technologist-limited (RT-L) to practice.

There is already a serious problem with under diagnosis and under treatment of the growing public health threat of osteoporosis. Much of the solution lies in wider availability and access to screening (densitometry). However, there is already a shortage of RTs and RT-Ls (general and densitometry) in Virginia, particularly in medically underserved areas. Since the amended RT-L licensure regulations went into effect April, 2000, it has become almost impossible to train and license a new DXA tech in Virginia because of the unavailability of the required ARRT education programs, the dismal pass rate on the ARRT core exam for licensure, and (for densitometry) the irrelevant educational requirements. This only serves to further limit the scope and reach of screening, diagnostic, and monitoring efforts, and unnecessarily raise the costs of scanning—all of which are diametrically opposed to the Board's mission to protect the health, safety, and welfare of the citizens of the Commonwealth.

Current regulations require a person to have 40 hours in general knowledge of x-rays and to pass the basic examination of the American Registry of Radiologic Technologists in order to be licensed. Yet a significant portion of the current education and examination requirement for RT-Ls involves aspects completely irrelevant to bone densitometry techs.

In order to adequately address the serious problem of a shortage of technicians to perform bone densitometry, the Board must amend its regulations. The inability of physicians and diagnostic centers to hire licensed technicians has an adverse impact on a significant proportion of Virginia's citizens, particularly peri- and postmenopausal women, and the suggested amendments are endorsed by the Board's Advisory Committee on Radiological Technology and a number of physicians across the state who have spoken to the Board about the problem.

## Alternatives

*Please describe, to the extent known, the specific alternatives to the proposal that have been considered or will be considered to meet the essential purpose of the action.*

Current regulations (18 VAC 85-101-70) allow the Board to license an applicant as a RT-L if he has been trained in any educational program it deems acceptable. Therefore, it would be possible to accept an alternate certification program in bone densitometry as evidence of adequate training to protect public safety. The problem rests with the examination requirement in 18 VAC 85-101-60, which requires the applicant to provide evidence that he has received a passing score as determined by the board on the core section of the ARRT examination for Limited Scope of Practice in Radiography.

Instead of the ARRT examination providing the basis for licensure, the Board needs to be able to accept another credential as the standard for bone densitometry technicians. Since 1995, the International Society for Clinical Densitometry (ISCD) has sponsored a professional certification program and continuing education courses in order to qualify physicians and technologists. Professional certification courses are offered throughout the year at sites throughout the U.S. and

globally. The technical skills and medical knowledge base required to proficiently perform bone densitometry are far better covered by the ISCD course than the current ARRT-directed *core* curriculum. In addition, the ISCD technologist certification course requires prior satisfactory completion (course and exam) of the DXA scanner *manufacturer's training and documented six months supervised, clinical scanning experience (and 100 scans;* the current licensure requirement is 10). This certification process is considered clinically rigorous and more relevant to what a well-trained DXA tech should know and be able to do than the ARRT *core* curriculum and exam.

Suggested language for the regulation would be:

**18 VAC 85-101-60. Examination requirements.**

*To qualify for a limited license to practice bone densitometry under the direction of a doctor of medicine, osteopathy, chiropractic, or podiatry, the applicant shall provide evidence that he has taken and passed a certifying examination by the International Society of Clinical Densitometry, or the ARRT, or comparable examination acceptable to the board.*

### Family Impact Statement

*Please provide a preliminary analysis of the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.*

The proposed regulatory action would not strengthen or erode the authority and rights of parents, encourage or discourage economic self-sufficiency, strengthen or erode the marital commitment or increase or decrease disposable family income.